

## The Federal Reserve and Central Banking

The Federal Reserve System is the central bank of the United States. A central bank is an institution that oversees and regulates the banking system and controls the money supply. The Federal Reserve System (known as “the Fed”) is made up of 12 privately owned District Federal Reserve Banks and a federal government agency that oversees the system, called the Board of Governors. The Fed has four basic functions:

1. Provide financial services for commercial banks (like holding reserves, providing cash, and clearing checks)
2. Supervise and regulate banking institutions to ensure the safety and soundness of the nation’s banking and financial system
3. Maintain stability of the financial system by providing liquidity to financial institutions in order to maintain their safety and soundness
4. Conduct monetary policy to prevent or address extreme fluctuations in the economy

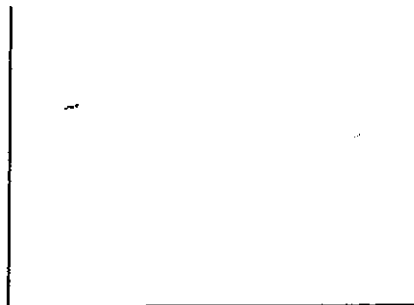
The Fed’s goal is “to promote effectively the goals of maximum employment, stable prices and moderate long-term interest rates.” A primary goal of the Fed is to stabilize prices, which is arguably the strongest contribution the Fed can make to promoting economic growth. Over time, it has become evident that monetary policy’s long-term influence over prices is strong but its influence over real output and real interest rates is mostly short term.

To promote employment and price stability, the Fed can use monetary policy to raise or lower interest rates through the money market. Lower interest rates promote spending and investment that leads to increased employment (this is called *expansionary* monetary policy). Higher interest rates prevent inflation and promote price stability (this is called *contractionary* monetary policy).

The Fed has three main policy tools it can use to control equilibrium interest rates in the money market: the reserve requirement, the discount rate, and open-market operations.

1. **The reserve requirement.** The Fed sets the percentages of bank deposits that must be held as reserves. Greater excess reserves lead banks to expand credit, which expands the money supply. Fewer excess reserves lead banks to reduce credit, which decreases the money supply. Changes in the money supply change equilibrium interest rates in the money market. Because changes in the reserve requirement can have powerful impacts, the reserve requirement is seldom used as a tool of monetary policy.
2. **The discount rate.** The discount rate is the rate that commercial banks must pay to borrow from the Fed. When it is cheaper to borrow from the Fed, banks will borrow more reserves; when it is more expensive to borrow from the Fed, banks will borrow less. More reserves lead banks to expand credit, which expands the money supply. Fewer reserves lead banks to reduce credit, which reduces the money supply. The discount rate is set by the Fed, generally a percentage point above the *federal funds rate* (which is the interest rate banks charge each other for overnight loans).

(D) The University of Michigan releases the index of consumer and business confidence, which indicates both are lower.



(E) Consumers in China decide to increase consumption.



### Expansionary Policy via Open Market Purchases

Now suppose the Fed believes the economy is heading into a recession and wishes to increase the money supply by \$100, so it uses open market operations and purchases \$10 worth of Treasury securities from the public.

Figure 4-6.2 shows the T-accounts after the effects of the Fed action work their way through the economy. Compare Figure 4-6.1 with Figure 4-6.2. The Fed's \$10 increase in reserve accounts yields a \$100 increase in the money supply.



Figure 4-6.2

#### T-Accounts after \$10 Open Market Purchase

Assets		Liabilities	
The Fed			
Treasury securities (+\$10)	\$93	\$36	Reserve accounts of banks (+\$10)
		\$57	Federal Reserve notes
-----			
Banks			
Reserve accounts (+\$10)	\$36	\$400	Checkable deposits (+\$100)
Federal Reserve notes	\$4		
Loans (+\$90)	\$495	\$135	Net worth (to stockholders)
-----			
Bank customers			
Checkable deposits (+\$100)	\$400	\$495	Loans (+\$90)
Federal Reserve notes	\$53		
Treasury securities (-\$10)	\$42		
Money supply = \$453 (\$400 + \$53)			

For the following questions, start with the T-accounts in Figure 4-6.1. Suppose the Fed wishes to *decrease* the money supply from \$353 to \$303 by open market operations. The reserve requirement is 10 percent.

1. Will the Fed want to buy or sell existing Treasury securities? \_\_\_\_\_
2. What is the money multiplier? \_\_\_\_\_
3. What is the value of Treasury securities that need to be bought or sold? \_\_\_\_\_

The equilibrium federal funds rate established in the money market is the focus of monetary policy, not the discount rate set directly by the Fed.

3. **Open market operations (OMOs).** OMOs refers to the Fed buying and selling U.S. Treasury bills, normally through a transaction with commercial banks that changes the banks' reserves. When the Fed buys Treasury bills, it increases the banks' reserves, and when the Fed sells Treasury bills, it decreases the banks' reserves. The change in the banks' reserves leads to a change in the money supply. Changes in the money supply change equilibrium interest rates in the money market. OMOs are the most frequently used monetary policy tool.

**Student Alert:** Open market operations include buying and selling government bonds. When you are asked about an open market operation, you should answer in terms of buying bonds or selling bonds.

### The Mechanics of Monetary Policy

To manage the money supply, the Fed uses the tools of monetary policy to influence the quantity of reserves in the banking system. The following examples use T-accounts to show how the Fed could use open market operations to increase the money supply by \$100.

Figure 4-6.1 shows T-accounts for the economy. The required reserve ratio is 10 percent. The bank holds \$26 in reserve accounts and \$4 in Federal Reserve notes (vault cash). Total bank reserves equal \$30, so total reserves equal required reserves and there are no excess reserves. Net worth = assets – liabilities.



Figure 4-6.1

#### T-Accounts

Assets		Liabilities	
The Fed			
Treasury securities	\$83	\$26	Reserve accounts of banks
		\$57	Federal Reserve notes
-----			
Banks			
Reserve accounts	\$26	\$300	Checkable deposits
Federal Reserve notes	\$4		
Loans	\$405	\$135	Net worth (to stockholders)
-----			
Bank customers			
Checkable deposits	\$300	\$405	Loans
Federal Reserve notes	\$53		
Treasury securities	\$52		
Money supply = \$353 (\$300 + \$53)			

7. Suppose that the \$100,000 had previously been held in Federal Reserve notes under the customer's mattress and that banks continue to hold no excess reserves. By how much will the customer's deposit cause the money supply to grow? \_\_\_\_\_
8. Circle the correct symbol in Table 4-6.1.



Table 4-6.1

**Fed Actions and Their Effects**

Federal Reserve action	Bank reserves	Money supply	Fed funds rate
(A) Sold Treasury securities on the open market	↑ ↓	↑ ↓	↑ ↓
(B) Bought Treasury securities on the open market	↑ ↓	↑ ↓	↑ ↓
(C) Raised the discount rate	↑ ↓	↑ ↓	↑ ↓
(D) Lowered the discount rate	↑ ↓	↑ ↓	↑ ↓
(E) Raised the reserve requirement	↑ ↓	↑ ↓	↑ ↓
(F) Lowered the reserve requirement	↑ ↓	↑ ↓	↑ ↓

9. In Table 4-6.2, indicate how the Fed could use each of the three monetary policy tools to pursue an expansionary policy and a contractionary policy.



Table 4-6.2

**Tools of Monetary Policy**

Monetary policy	Expansionary policy	Contractionary policy
(A) Open market operations		
(B) Discount rate		
(C) Reserve requirements		

4. Fill in Figure 4-6.3 to show the accounts after open market operations are finished and all changes have worked their way through the economy.



Figure 4-6.3

**T-Accounts after Open Market Operations Are Finished**

Assets		Liabilities	
The Fed			
Treasury securities		Reserve accounts of banks	
		Federal Reserve notes	
	\$57		
-----			
Banks			
Reserve accounts		Checkable deposits	
Federal Reserve notes			
Loans	\$135	Net worth (to stockholders)	
-----			
Bank customers			
Checkable deposits		Loans	
Federal Reserve notes	\$53		
Treasury securities			
Money supply = _____			

For the following questions, suppose banks keep zero excess reserves and the reserve requirement is 15 percent.

5. What is the deposit expansion multiplier? \_\_\_\_\_
6. A customer deposits \$100,000 in a checking account.
- (A) How much must the bank add to its reserves? \_\_\_\_\_
- (B) How much of this can the bank lend to new customers? \_\_\_\_\_
- (C) In what two forms can a bank hold the new required reserves? \_\_\_\_\_

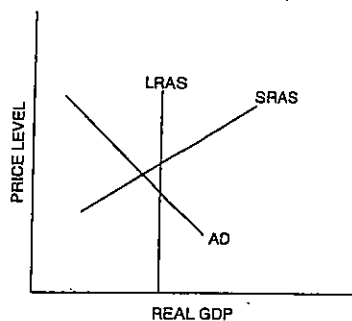
## Monetary Policy

Monetary policy is the action of the Federal Reserve (the Fed) to prevent or address extreme economic fluctuations. The Fed uses its monetary policy tools to influence equilibrium interest rates in the money market through its control of bank reserves. The Fed lowers interest rates through expansionary monetary policy to prevent or address recessions, and it raises interest rates through contractionary monetary policy to prevent or address inflation. Monetary policy is transmitted to the economy through changes in aggregate demand. Monetary policy will have both short-run and long-run effects in the economy. In the following figures, long-run aggregate supply, short-run aggregate supply, and demand curves are represented by LRAS, SRAS, and AD.



Figure 4-7.1

### Effects of Monetary Policy in the Economy (Recession)



1. Suppose that initially the economy is at the intersection of AD and SRAS in Figure 4-7.1.
  - (A) What monetary policy can the Fed implement to move the economy to full-employment?
  - (B) If the Fed is going to use open market operations, it should (*buy / sell*) Treasury securities.
  - (C) The effect will (*increase / decrease*) Treasury security (bond) prices.
  - (D) In the short run, what is the effect on nominal interest rates? Explain.
  - (E) In the short run, what happens to real output? Shift the curve on the graph to show how the Fed's action results in a change in real output and explain why the shift occurs.
  - (F) In the short run, what happens to the price level? Explain how the Fed's action results in a change to the price level.



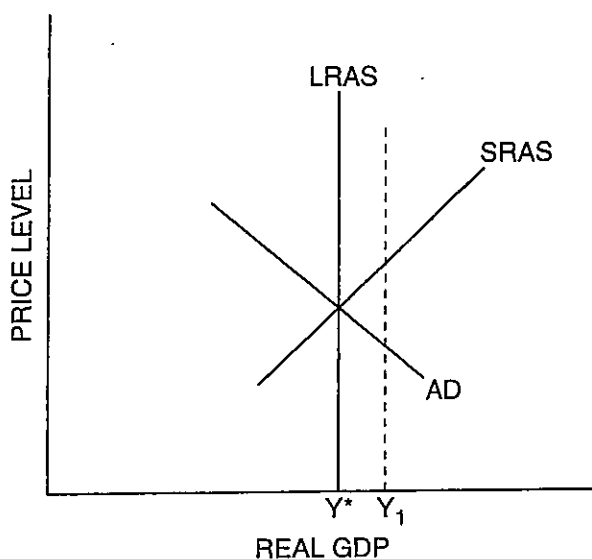


3. In the situation shown in Figure 4-7.3, suppose that the monetary authorities decide to maintain the level of employment represented by the output level  $Y_1$  by using expansionary monetary policy.



Figure 4-7.3

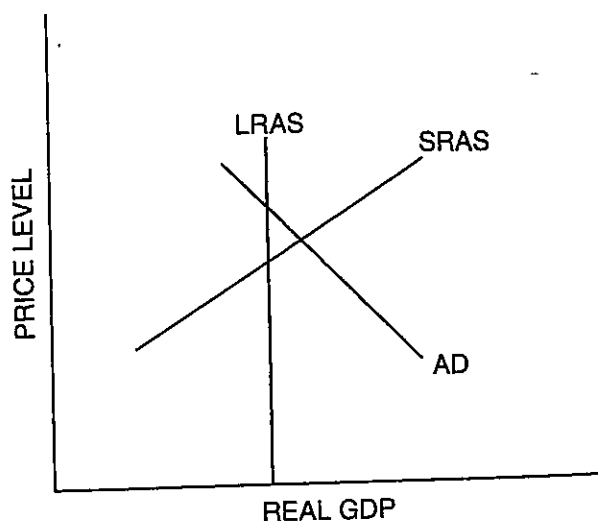
### Monetary Policy in the Long Run



- (A) Explain the effect of the expansionary monetary policy on the price level and output in the short run.
- (B) Explain the effect on the price level and output in the long run.
- (C) Explain what you think will happen to the nominal rate of interest and the real rate of interest in the short run as the Fed continues to increase the money supply. Explain why.
- (D) Explain what you think will happen to the nominal rate of interest and the real rate of interest in the long run. Explain why.



Figure 4-7.2

**Effects of Monetary Policy in the Economy (Inflation)**

2. Suppose that initially the economy is at the intersection of AD and SRAS in Figure 4-7.2.
- (A) What monetary policy can the Fed implement to move the economy to full-employment?
  - (B) If the Fed is going to use open market operations, it should (*buy / sell*) Treasury securities.
  - (C) The effect will (*increase / decrease*) Treasury security (bond) prices.
  - (D) In the short run, what is the effect on nominal interest rates? Explain.
  - (E) In the short run, what happens to real output? Shift the curve on the graph to show how the Fed's action results in a change in real output and explain why the shift occurs.
  - (F) In the short run, what happens to the price level? Explain how the Fed's action results in a change to the price level.

(C) In the short run, what happens to employment and nominal wages? Explain why.

(D) In the short run, what happens to nominal interest rates and real interest rates?

(E) In the long run, what happens to real output? Explain why.

(F) In the long run, what happens to the price level? Explain why.

(G) In the long run, what happens to employment and nominal wages? Explain why.

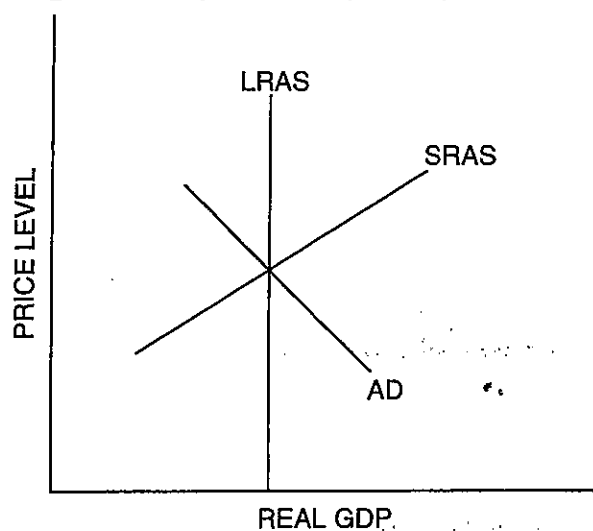
(H) In the long run, what happens to the nominal interest rate and the real interest rate?

4. Many economists think that moving from short-run equilibrium to long-run equilibrium may take several years. List three reasons why the economy might not immediately move to long-run equilibrium.
5. Briefly summarize the long-run impact of an expansionary monetary policy on the economy.




Figure 4-7.4

**Expansionary Monetary Policy**



6. Suppose that initially the economy is at the intersection of AD and SRAS as shown in Figure 4-7.4. Now, the Fed decides to implement expansionary monetary policy to increase the level of employment.
  - (A) In the short run, what happens to real output? Explain why.
  - (B) In the short run, what happens to the price level? Explain why.

# The Federal Reserve In Action



---

---

---

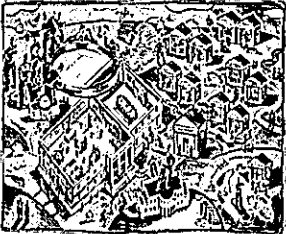
---

---

---

---

## What is the Fed?



- Central bank of the United States
- Established in 1913
- Purpose is to ensure a stable economy for the nation

---

---

---

---


---

---

---

## Roles & Responsibilities

- Conduct the nation's monetary policy
- Supervise and regulate banking institutions
- Operate a nationwide payments system



---

---

---

---

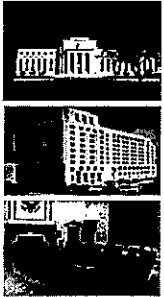
---

---

---

### Federal Reserve System Structure

- Board of Governors
- 12 Reserve Banks
- Federal Open Market Committee




---

---

---

---

---


---

---

---

### Board of Governors

- Seven members
  - Appointed by the president
  - Confirmed by the Senate
  - Serve staggered 14-year terms
- Work includes:
  - Analyzing economic developments
  - Supervising and regulating the operations of Federal Reserve Banks
  - Exercising responsibility in the nation's payments system




---

---

---

---

---

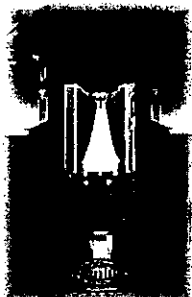
---

---

---

### Board of Governors (cont'd)

- Work includes (cont'd):
  - Administering consumer credit protection laws
  - Authorizing changes in banks' reserve requirements
  - Supervising Fed member banks and other financial entities
  - Authorizing changes in the Fed's discount rate




---

---

---

---

---

---

---

---



---

---

---

---


---

---

---

Federal Reserve Banks

- o Operate a nationwide payments system
- o Distribute the nation's currency and coin
- o Supervise and regulate member banks and bank holding companies
- u Serve as banker for the U.S. Treasury
- u Contribute to monetary policymaking through Bank presidents' participation in the FOMC



---

---

---

---

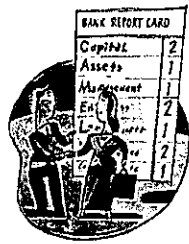
---

---

---

Supervision & Regulation

- o Promote safety and soundness of banking system along with other regulatory bodies
  - FDIC, OCC, OTS, state banking regulators
- u Ensure compliance with laws and regulations
- o Oversee international banking interests
- o Administer consumer credit protection laws



BANK REPORT CARD	
Capital	2
Assets	1
Management	1
Banking	2
Law	1
Regulation	2

---

---

---

---

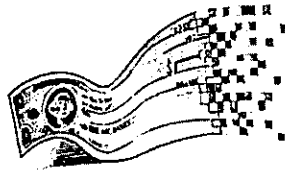
---

---

---

## Financial Services

- Supply currency and coin to banking institutions
- Clear more than one-third of nation's checks
- Transfer funds electronically (ACH, Fedwire)
- Serve as bank for the U.S. Treasury




---

---

---

---

---

---

---

## Research



- Gather, analyze and disseminate economic data
- Focus on all aspects of the economy (regional to international levels)
- Analyze regional and national markets and economic data
- Design and test econometric models used to produce hard data that factor into policymaking decisions

---

---

---

---

---

---

---

## Monetary Policy

- Policy changes affect the nation's supply of money and credit.
- Actions have real short- and long-term effects on the economy.




---

---

---

---

---

---

---



## Federal Open Market Committee



- Sets and directs U.S. monetary policy
- Seven governors
- Five presidents (New York and four others on a rotating basis)
- Nonvoting presidents participate fully
- Final interest rate decision is made by the 12-member Federal Open Market Committee (FOMC)

---

---

---

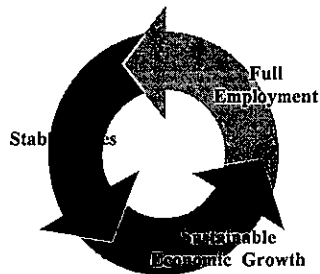
---

---

---

---

## Goals of Monetary Policy




---

---

---

---

---

---

---

## Key Tools of Monetary Policy

- Discount Rate
  - The interest rate charged by the Federal Reserve to banks that borrow on a short-term (usually overnight) basis
- Reserve Requirements
  - The amount of money banks must keep on reserve at the Fed
- Open Market Operations
  - Buying and selling Treasury securities between the Fed and selected financial institutions in the open market
  - Most important tool; directed by the FOMC

---

---

---

---

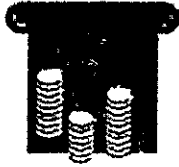
---

---

---

## Key Federal Reserve Interest Rates

- Federal Funds Rate
  - The market-based interest rate which banks charge each other on overnight loans of their reserve balances held at the Fed. The Fed achieves this rate through Open Market Operations.
  - A target rate
- Discount Rate
  - Applies to short-term loans made directly to commercial banks from the Federal Reserve System.
  - Typically set at 1 percentage point above the Federal Funds Rate.




---

---

---

---

---

---

---

---

## Monetary Policy at the Grassroots

- Each head office and branch of the Federal Reserve System has a local Board of Directors.
  - 7-9 individuals
- Board members provide various perspectives and economic data from different regions and industries.
- Boards of directors vote on the discount rate.
- Boards of directors influence policymaking at the national level through "real-world" input.

---

---

---

---

---

---

---

---

## Effects of Low Interest Rates



- Generally, low interest rates stimulate the economy because there is more money available to lend.
  - Consumers buy cars and houses.
  - Businesses expand, buy equipment, etc.
- Why does the Fed lower interest rates?
  - If inflation is in check, lower rates stimulate economic activity, thus boosting economic growth.

---

---

---

---

---


---

---

---

### Effects of High Interest Rates

- The Fed raises interest rates as an effective way to fight inflation.
  - Inflation—a sustained rise in the general price level; that is, all prices are rising together.
- Consumers pay more to borrow money, dampening spending.
- Businesses have difficulty borrowing; unemployment rises.




---

---

---


---

---

---

---

### Review



- What are the three main roles of the Federal Reserve System?
- Where is your Fed?
- What are the goals of monetary policy?
- What happens when the Fed lowers interest rates? Raises interest rates?
- What is inflation? Why should it concern you?
- What is the name of the Fed's monetary policymaking body?
- What is the discount rate? Federal funds rate?

---

---

---

---

---

---

---



The Federal Reserve Building in Washington. Credit J. David Ake/Associated Press

## Some Background: Strong vs. Weak Currency

Battles over central banking have historically pitted financial elites who wanted to limit the availability of money, thus preserving its value, against farmers, businessmen and other borrowers who wanted money to be plentiful — and cheap. Each side has sometimes regarded the central bank as its great ally in that fight, and sometimes as its bitter enemy.

Since the Great Recession the Fed has mostly sided with the borrowers, creating vast amounts of new money and holding short-term interest rates near zero. Inevitably, that has angered creditors, and sparked efforts to swing the pendulum in the other direction.

---

Photo



**GENERAL JACKSON SLAYING THE MANY HEADED MONSTER.**

A cartoon satirizing Andrew Jackson, shown raising a cane labeled "veto," and his battle against the Bank of the United States and its supporters among state banks.

## 1. A Philadelphia Story: The Banks of the United States

The nation's first two central banks, both called the Bank of the United States, were private, for-profit organizations chartered by Congress. The first (1791-1811) was created to help the government pay its Revolutionary War debt, stabilize the country's currency and raise money for the new government. It was the dream of Alexander Hamilton, secretary of the Treasury, who overcame resistance from Thomas Jefferson (who wrote "I believe that banking institutions are more dangerous to our liberties than standing armies") and other Southern lawmakers. When its 20-year charter expired, Congress chose not to renew it.

The Second Bank of the United States was chartered a few years later, in the aftermath of the War of 1812, after Congress decided it had a mistake. But it lasted just 17 years. President Andrew Jackson said the bank concentrated too much economic power with a corrupt moneyed elite and vetoed a bill to extend its charter in 1832. Supporters of the the bank rallied around Henry Clay, Jackson's opponent for reelection that year, but the "Bank War" ended when Jackson won easily. United States Treasury funds were withdrawn and deposited in state banks; the nation would be without a central bank for more than 70 years.

The headquarters of both banks still stand about a block apart in downtown Philadelphia.

*"The bank is trying to kill me, but I will kill it!"*

—Andrew Jackson

Photo



Crowds gather across the street from a failed New York bank in 1908. Credit George Grantham Bain Collection/Library of Congress

## 2. Perpetual Panic: Life Without a Central Bank

A severe financial crisis drove the economy into a deep recession in 1837, just one year after the demise of the Second Bank. Such crises became a recurring event in American life and, as the economy grew, so did their size and the frequency. Banks created the New York Clearing House as a private-sector backstop, but it proved inadequate for the task. The government also was hamstrung. In the absence of a central bank, the United States regulated the value of its currency by guaranteeing that dollars could be exchanged for gold, and sometimes silver. This meant the government could not respond to financial crises, and the resulting economic downturns, by increasing the supply of money.

In 1907, yet another crisis was brought about by a failed attempt to corner the stock of the United Copper Company. Government officials and financial executives jerry-rigged a response: an emergency lending pool orchestrated by J. Pierpont Morgan. But the crisis proved to be a tipping point in the political debate about the need for a central bank. There was a growing political consensus that Wall Street needed a permanent fire department.

*"Unless we have a central bank with adequate control of credit resources, this country is going to undergo the most severe and far reaching money panic in its history."*

—Jacob Schiff, a prominent New York banker, in 1907

---

Photo

President Woodrow Wilson signing the Federal Reserve Act of 1913, in a painting by Wilbur G. Kurtz Sr. He is surrounded by members of his cabinet and Congressional leaders. Credit Woodrow Wilson Presidential Library, Staunton, Va.

### 3. Third Time's the Charm: The Federal Reserve Act of 1913

In November 1910, Senator Nelson Aldrich met with a group of bankers at a resort on Georgia's Jekyll Island and hammered out a plan for a new central bank. The idea touched on many of the great political battles of the age: The states against Washington; Wall Street financiers against smaller banks, particularly in the South and West; populists against the Gilded Age elite. The bill that emerged from several years of debate, signed by President Woodrow Wilson, was an awkward compromise: There would be 12 privately owned reserve banks in major cities across the country, preserving the power of financial elites. But the banks would be overseen by a board of presidential appointees, including the Treasury secretary, granting the public a new measure of control over the financial system.

Before the Fed was fully established, however, the old system took a final bow. A financial crisis struck in 1914, and roughly twice as many banks failed as in 1907.

*"We shall deal with our economic system as it is and as it may be modified, not as it might be if we had a clean sheet of paper to write upon; and step by step we shall make it what it should be."*

—Woodrow Wilson, from his first inaugural address

---

Photo

In 1933, after some banks limited withdrawals to 5 percent or less, customers waited to enter the National City Bank in Cleveland. Credit Associated Press

## 4. Recession and Response

Instead of preventing crises, the Federal Reserve helped to cause the Great Depression. The Fed was supposed to manage the gold standard — to make sure the economy was not choked by a lack of money and a resulting spike in interest rates. Instead, the Fed was paralyzed by disagreements between regional banks and the central board. It let the money supply shrink by one-third. The result was the worst economic crisis in the nation's history.

Congress responded to the Fed's failure by greatly increasing its power and responsibilities. In 1934 it authorized the president to devalue the dollar, beginning the long process of replacing the gold standard with a currency whose value is managed by the Fed. In 1935 it gave the Fed responsibility for "the general credit situation of the country." The act also removed the Treasury secretary from the Fed's board and created a new policy-making committee where board members would outnumber reserve bank presidents.

*"I would like to say to Milton and Anna: Regarding the Great Depression. You're right, we did it. We're very sorry. But thanks to you, we won't do it again."*

—Ben Bernanke, then a Fed governor, in a 2002 speech addressing Milton Friedman and Anna Schwartz, whose research documented the Fed's role in causing the Great Depression

---

Photo

The Federal Open Market Committee in 1966, led by the Fed chairman, William McChesney Martin, seated center. Credit Fabian Bachrach

## 5. The Long Road to Independence



The central bank now had the freedom to encourage growth by printing money, and the responsibility not to print too much. Politicians who were focused on short-term problems were quick to demand money and, for the next several decades, the Fed hesitated to say no.

In 1942, at the request of the Treasury Department, the Fed agreed to hold down interest rates on government bonds to help finance military spending for World War II. It kept rates low for almost a decade, through the beginning of the Korean War, until rising inflation finally induced the Treasury to sign a 1951 accord affirming the Fed's autonomy to raise rates.

In the 1960s, Wright Patman, a populist Democrat congressman from Texas and chairman of the House banking committee, repeatedly introduced legislation to roll back the Federal Reserve Act of 1913, maintaining that, in the Fed, "a body of men exist who control one of the most powerful levers moving the economy and who are responsible to no one."

And in 1965, President Lyndon B. Johnson, who wanted cheap credit to finance the Vietnam War and his Great Society, summoned Fed chairman William McChesney Martin to his Texas ranch. There, after asking other officials to leave the room, Johnson reportedly shoved Martin against the wall as he demanding that the Fed once again hold down interest rates. Martin caved, the Fed printed money, and inflation kept climbing until the early 1980s.

*"I hope you have examined your conscience and you're convinced you're on the right track."*

—Lady Bird Johnson, spoken to William McChesney Martin, on his arrival at the LBJ ranch

---

Photo

Paul A. Volcker, shown in 2009. He was appointed Fed chairman in 1979 with the task of controlling galloping inflation. Credit Brian Snyder/Reuters

## 6. The Volcker Rule: An Independent Central Bank

Congress finally formalized its demands in 1978. A recession in the mid-1970s had pushed the unemployment rate as high as 9 percent, and Democrats, frustrated by what they saw as the Fed's inadequate response, won passage of legislation establishing the so-called dual mandate. The Fed was instructed to pursue maximum employment and price stability.

It turned out to be a high-water mark for Congressional interference. Inflation rose by 11 percent the following year, and President Jimmy Carter agreed to appoint a new Fed chairman, the independent-minded Paul A. Volcker. Over

the next several years, Mr. Volcker would raise interest rates sharply, driving the economy into a deep recession but ultimately bringing inflation under control. President Ronald Reagan, meanwhile, made a point of respecting the Fed's independence. Volcker was still subjected to sharp Congressional pressure, but it was mostly political theater. The Fed had declared its independence.

*"Every time he had a press conference somebody was urging him to take a slap at the Federal Reserve, but he never did."*

—Paul Volcker, referring to President Reagan

---

Photo

Ben Bernanke, the Fed chairman, takes questions from reporters at an April 2011 news conference. Credit Jim Watson/Agence France-Presse — Getty Images

## 7. Smokescreens and Sunshine: The Fed Opens Up

Between the great inflation of the early 1980s and the Great Recession that began in 2008, the Fed and the economy enjoyed more than two decades of relative peace and quiet, a period that Fed officials sometimes call the Great Moderation. Inflation trended downward and, except for a few short recessions, unemployment stayed down too. And Fed officials came to see these trends as a validation of their newfound independence.

The Fed also began to change its secretive culture. The trend began reluctantly, under pressure from critics who argued that independence required transparency. In 1983, for example, the Fed promised Congress that it would begin to release its Beige Book, a summary of economic reports from its regional reserve banks, as a way of distracting attention from more important reports that it was determined to keep secret. But the Fed gradually concluded that transparency could increase the power of monetary policy. In 1994, it began to announce changes in policy at the end of each policy-making session. In 2004, it began to publish edited accounts of its discussions three weeks after each session. And in 2011, its chairman, Ben S. Bernanke, began to hold quarterly news conferences.

*"Since I've become a central banker, I've learned to mumble with great coherence. If I seem unduly clear to you, you must have misunderstood what I said."*

—Alan Greenspan, Fed chairman, in 1987, before the central bank's communications revolution

*"The Federal Reserve is the most transparent central bank to my knowledge in the world. We have made clear how we interpret our mandate and our objectives and provide*

*extensive commentary and guidance on how we go about making monetary policy decisions."*

—Janet L. Yellen, Fed chairwoman, in 2014, after the communications revolution

---

Photo

Protesters in April 2009, outside an event where Ben Bernanke, the Fed chairman, was speaking. Credit Jason Miczek/Reuters

## 8. The Great Recession, and 'Audit the Fed'

The Fed's long run as a political darling came to a crashing end in 2008. Its lax oversight of the financial system was one reason for the severity of the crisis, and the smartest guys in Washington had failed to see it coming. The Fed's response was also controversial: It provided expansive support for the financial system, preserving some of America's least popular companies, not to mention foreign banks. And then it embarked on an expansive stimulus campaign to revive the economy.

In the aftermath of the crisis, Congress moved quickly to strengthen the Fed's regulatory responsibilities. It also imposed some limits on the Fed's ability to repeat its rescue of the financial system. But it is the stimulus campaign that has prompted the most controversy.

In an inversion of the historical pattern, congressional Republicans have criticized the Fed for printing too much money, arguing higher inflation will be the inevitable consequence. And they have put forward proposals to constrain the central bank. One bill, known as "Audit the Fed," would authorize the General Accountability Office to review the Fed's monetary policy decisions. Another approach, backed by the House Financial Services Committee, would require the Fed to publicly articulate a set of rules it intends to follow in making monetary policy, and then explain any deviations.

*"The Federal Reserve System must be challenged. Ultimately, it must be eliminated. The government cannot and should not be trusted with a monopoly on money. No single institution in society should have power this immense."*

—From "End the Fed" (2009) by Ron Paul

More on NYTimes.com